

FASEB SUMMER RESEARCH CONFERENCES
PROPOSED PROGRAM

CONFERENCE ON PLANT GENE EXPRESSION
CHAIRPERSON Peter H. Quail
Affiliation Plant Gene Expression Center, Albany, CA
VICE-CHAIRPERSON Michael Bevan
Affiliation PBI, Cambridge UK

SESSION 1 - Date: Monday, August 7

9:00 a.m. - 12:00 p.m.

Topic: Mutant isolation and analysis I

Discussion Leader: *Virginia Walbot - Stanford University

- Speakers: 1. 9:00-9:30 *Howard Goodman - Massachusetts General
Mapping the Arabidopsis genome
2. 9:30-10:00 *Virginia Walbot - Stanford University
Mutator-induced mutants
3. 10:00-10:30 *Barbara Baker - PGEN - Molecular genetic
properties of Ac and Ds transposition in
heterologous plant species: Strategies
for transposon tagging
- 10:30-11:00 Coffee
4. 11:00-11:30 *Stephen Dellaporta - Yale University
transposon tagging
5. 11:30-12:00 *Jonathan Jones - Sainsbury Laboratory
Transposition in heterologous systems:
means and ends

SESSION 2 - Date: Monday, August 7

7:30 p.m. - 10:00 p.m.

Topic: Mutant isolation and analysis II

Discussion Leader: *Gerald Fink - MIT

- Speakers: 1. 7:30-8:00 *John Schiefelbein - Michigan State
University - Genetics of root development
and Ac in Arabidopsis
2. 8:00-8:30 *Gerald Fink - Tryptophan biosynthesis in
Arabidopsis thaliana
- 8:30-9:00 Coffee

*Acceptances to date

3. 9:00-9:30 *Michael Freeling - U.C. Berkeley -
Developmentally complex changes in gene
expression caused by the insertion or
excision of Mu transposons
4. 9:30-10:00 *Martin Yanofski - Caltech
Genes directing flower development in
Arabidopsis

SESSION 3 - Date: Tuesday, August 8

9:00 a.m. - 12:00 p.m.

Topic: Floral development

Discussion Leader: *Martha Crouch - Indiana University

- Speakers:
1. 9:00-9:30 *Enrico Coen - John Innes Institute
Floral mutants in Antirrhinum majus
 2. 9:30-10:00 *Adrienne Clarke - University of Melbourne
Self-incompatibility in flowering plants
 3. 10:00-10:30 *Sam Levings - North Carolina State
University - Cytoplasmic male sterility
and disease susceptibility in maize
 - 10:30-11:00 Coffee
 4. 11:00-11:30 *Sheila McCormick - PGEC - Molecular
characterization of anther-expressed
genes in normal and male sterile tomatoes
 5. 11:30-12:00 *Martha Crouch - Gene expression during
pollen development

SESSION 4 - Date: Tuesday, August 8

2:00 p.m. - 4:30 p.m.

Topic: Workshop - Transformation methods

Discussion Leader: *Rob Horsch - Monsanto

- Speakers:
1. 2:00-2:30 *Michael Fromm - PGEC - Gene transfer and
expression in maize
 2. 2:30-3:00 *Ken Barton - Agracetus - Soybean
transformation
 3. 3:00-3:30 *Kokichi Hinata - Tohoku University
rice transformation
 4. 3:30-4:00 *Luis Herrera-Estrella - CIEA del IPN,
Irapuato - Agrobacterium-mediated monocot
transformation
 5. 4:00-4:30 *Emmanuel Picard - CNRS Gif sur Yvette
wheat transformation

SESSION 5 - Date: Tuesday, August 8

7:30 p.m. - 10:00 p.m.

Topic: Developmentally-regulated genes

Discussion Leader: *Robert Goldberg - UCLA

- Speakers: 1. 7:30-8:00 *Robert Goldberg - Regulation of seed protein gene expression
2. 8:00-8:30 *Natasha Raikhel - Michigan State University
Cellular and molecular expression of Graminaeae lectins
- 8:30-9:00 Coffee
3. 9:00-9:30 *Roger Beachy - Washington University
embryogenesis
4. 9:30-10:00 *Don Grierson - University of Nottingham
fruit ripening

SESSION 6 - Date: Wednesday, August 9

9:00 a.m. - 12:00 p.m.

Topic: Regulatory molecules I

Discussion Leader: *David Baulcombe - Sainsbury Labs

- Speakers: 1. 9:00-9:30 *David Baulcombe - The use of transient expression to analyze the regulation of genes by gibberellic acid
2. 9:30-10:00 *Sakis Theologis - PGEC - The ACC synthase gene
3. 10:00-10:30 *Robert Fischer - U.C. Berkeley
Regulation of tomato fruit ripening
- 10:30-11:00 Coffee
4. 11:00-11:30 *Donald McCarty - University of Florida
Molecular analysis of the viviparous-1 locus in maize
5. 11:30-12:00 *Mark Estelle - Indiana University
Characterization of hormone resistant mutants of Arabidopsis

SESSION 7 - Date: Wednesday, August 9

2:00 p.m. - 4:30 p.m.

Topic: Workshop - Novel Methods

Discussion Leader: *Rob Horsch

- Speakers: 1. 2:00-2:30 *Ingo Potrykus - Swiss Fed. Inst. Technology
Gene transfer by microinjection into proembryos
2. 2:30-3:00 *Jerzy Paszkowski - Swiss Fed. Inst. Technology - Gene replacement in plants

3. 3:00-3:30 *Bill Hiatt - Calgene - Reduction of polygalacturonase activity in tomato fruit by antisense RNA
4. 3:30-4:00 *Jim Haselhoff - CSIRO - ribozymes
5. 4:00-4:30 *Steve Rogers - Monsanto - Gemini virus vectors for transient assay of gene expression

SESSION 8 - Date: Wednesday, August 9

7:30 p.m. - 10:00 p.m.

Topic: Regulatory molecules II

Discussion Leader: *Tom Guilfoyle - University of Missouri

- Speakers:
1. 7:30-8:00 *Harry Klee - Monsanto - The effects of auxin and cytokinin perturbation on plant growth and development
 2. 8:00-8:30 *Tom Guilfoyle - University of Missouri Organ- and tissue-specific auxin-regulated gene expression
 - 8:30-9:00 Coffee
 3. 9:00-9:30 *Jeff Schell - Max Planck, Köln Genes involved in auxin signal transduction
 4. 9:30-10:00 *Wesley Bruce - PGEC - Promoter analysis of an oat phytochrome gene

SESSION 9 - Date: Thursday, August 10

9:00 a.m. - 12:00 p.m.

Topic: Environmentally-regulated genes

Discussion Leader: *Anthony Cashmore - University of Pennsylvania

- Speakers:
1. 9:00-9:30 *Elaine Tobin - UCLA - Phytochrome-regulated genes in Lemna and Arabidopsis
 2. 9:30-10:00 *Anthony Cashmore - University of Pennsylvania - Factors mediating expression of light-regulated genes
 3. 10:00-10:30 *Laura Savokin*
*Philip Gilman - Rockefeller University Regulation of light-responsive genes
 - 10:30-11:00 Coffee
 4. 11:00-11:30 *Gloria Coruzzi - Rockefeller University Regulation of genes for enzymes along a N-metabolic pathway in plants
 5. 11:30-12:00 *William Gurley - University of Florida Cis-/trans-regulation of heat shock promoters

SESSION 10 - Date: Thursday, August 10

2:00 p.m. - 4:00 p.m.

Topic: Plant-pathogen interactions

Discussion Leader: *Christopher Lamb - Salk Institute

- Speakers: 1. 2:00-2:30 *Christopher Lamb - Defense gene regulation
2. 2:30-3:00 *Clarence Ryan - Washington State University
Regulation of expression of proteinase
inhibitors in plants
3. 3:00-3:30 *Lothar Willmitzer - Inst. für Genbiol.
Forschung, Berlin - Analysis of the
expression of proteinase inhibitor II
genes in potato
- 3:30-4:00 Coffee
4. 4:00-4:30 *Jeff Bennetzen - Purdue University
Mutational analysis of disease resistance
genes in maize
5. 4:30-5:00 *Brian Staskawicz - U.C. Berkeley
Molecular analysis of recognitional
specificity and disease resistance in
plant-bacterial interactions

SESSION 11 - Date: Thursday, August 10

7:30 p.m. - 8:30 p.m.

Topic: *Leon Dure: University of Georgia - Keynote Address -
LEA proteins and their genes

SESSION 12 - Date: Friday, August 11

9:00 a.m. - 11:30 a.m.

Topic: Agricultural applications

Discussion Leader: *Robb Fraley - Monsanto

- Speakers: 1. 9:00-9:30 *Robb Fraley - Monsanto
Crop improvement research at Monsanto
2. 9:30-10:00 *Jan Leemans - Plant Genetic Systems
TBA
- 10:00-10:30 Coffee
3. 10:30-11:00 *John Bedbrook - Advanced Genetic Sciences
TBA
4. 11:00-11:30 *Carl Falco*
~~*Barbara Mazer~~ - Du Pont - Herbicide
resistance imparted by altered ALS genes

Bus 12:00